DOCUMENT RESUME

ED 037 052 EF 001 739

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TITLE	Development Program for the Humanities and the Project Program for the New Humanities Building for the University of Pennsylvania. The General State Authority of the Commonwealth of Pennsylvania.
INSTITUTION	Pennsylvania Univ., Philadelphia. Univ. Planning Office.
PUB DATE	Nov 65
NOTE	81p.
EDRS PRICE	EDRS Price MF-$0.50 HC-$4.15
DESCRIPTORS	*Architectural Programing, *College Buildings, *Educational Specifications, Equipment, Facility Case Studies, *Facility Guidelines, *Higher Education, Offices (Facilities), Space Classification, Space Utilization

ABSTRACT

General developmental considerations, space and facility requirements, and facility equipment needs for the new humanities building are described and summarized. Net floor area and total net floor area are charted for each room facility, as study, office, classroom, conference/seminar area, or work area, of each department comprising the Humanities division. Fixed and movable equipment is listed for each room facility. Other facilities briefly described include receiving and loading facilities, elevators, utilities, and audio-visual services. (HH)

ED037052

DEVELOPMENT PROGRAM FOR THE HUMANITIES

and the project program for

THE NEW HUMANITIES BUILDING
for the University of Pennsylvania

The General State Authority of
The Commonwealth of Pennsylvania

University Planning Office · November 1965

EF 001 739

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
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PREFACE

The Humanities departments are geographically dispersed on Campus. Many of them are housed in far from adequate quarters. The need to correct this situation has been documented by the Education Survey (1959), the report of the Committee on Educational Planning (delivered to the Trustees by Professor George W. Taylor on May 16, 1961), and the College Committee on the Humanities Building which transmitted its detailed proposal to President Gaylord P. Harnwell on October 26, 1961. The members of the College Committee were: Dr. E. Sculley Bradley, Dr. Robert D. Dripps, Dr. Otto Springer, Dr. S. Reid Warren, Jr., Dr. Vincent H. Whitney, and Dr. William E. Stephens (Chairman).

Since the College Committee report was completed, the overall space and facility requirements of the Humanities departments, the proper location of a new building, and the specific program for a New Humanities Building to replace the existing Hare Building have been the subject of continuing faculty study in collaboration with the University Planning Office. As specific questions have required policy deliberation, such matters have been brought to the Executive Planning Committee on the Physical Plant for review and discussion.

This collaborative effort has produced the two part program presented on the following pages. Although this program has been primarily written for the guidance of the architects who will prepare the design and contract documents for the New Humanities Building, it is also meant to serve as a guide for (1) locating Humanities activities within the complex of existing central campus buildings and (2) suggesting the extent to which additional new construction may be needed for the Humanities activities not to be housed in the Hare Building replacement.

Many persons and study groups have contributed substantially toward identifying the physical plant requirements of the Humanities departments and bringing together the necessary specific information. In this effort, special thanks are due to Dr. Otto Springer, Dean of the College, Dr. Charles L. Babcock, former Vice-Dean of the College, Dr. Claude Welch, Associate Dean of the College, and to the chairmen of the departments concerned, all of whom have contributed much time and thought in preparing the foundations on which this program is based.

The able and patient assistance of Mrs. Margaret DiSilvestro and Mrs. Barbara Esposito, Secretaries, and Mr. John L. Walters, Jr. Delineator-Draftsman, in preparing the copy and illustrative material for this program is also most appreciated.

ROBERT M. LAMISON
Architect-Planner
University Planning Office
November 1965

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I DEVELOPMENT PROGRAM FOR THE HUMANITIES

INTRODUCTION

The Humanities departments are here understood to be American Civilization, Classical Studies, English, General Literature, Germanic Languages, History, Linguistics, Oriental Studies, Philosophy, Religious Thought, Romance Languages, Slavic Languages, South Asia Regional Studies, Music, and Art. These departments are part of, or offer courses in, the College of Arts and Sciences.

The University has always recognized the importance of liberal education in its total educational effort and the function of the College in this effort. It has also been apparent for more than a decade that the Humanities departments have had a distressing need for more space and better equipment, if they are to continue to play a significant role in the College's obligation to provide its students and those of the College for Women with a liberal education, as well as to provide instruction in these areas for the Wharton and Engineering Schools.

The studies and discussions which have preceded the writing of this program have attempted to establish the total space and facility requirements of each Humanities department as of 1970, the extent to which such requirements can be provided within existing buildings (when properly renovated), and the extent to which new facilities will need to be constructed. A key consideration in these studies, and the deliberations that have attended them, has been the proper location of the Humanities components with relation to the central University Libraries (Van Pelt and Dietrich), as well as the endeavor to channel the heaviest flow of student circulation between these libraries, the classrooms, faculty studies, departmental headquarters, and eating facilities without the necessity of crossing much-travelled public traffic arteries. The central location called for in the resolution of the Faculty of the College of Arts and Sciences (May 30, 1961) and the report of the College Committee on the Humanities Building (October 26, 1961) is reflected, therefore, in the two part nature of this program: (1) with regard to the overall space and facility requirements by 1970 and (2) with regard to the New Humanities Building that will be constructed south of and linked to Logan Hall and will replace the present Hare Building.

The general development objectives for the Humanities departments can be described as follows:

1. To provide adequate accommodations for the junior staff, such as teaching fellows and instructors;

2. To provide a sufficient number of single studies for all faculty members of the rank of assistant professor, associate professor, and professor;

3. To concentrate, to the extent possible, all members and activities of a department within the same physical area;

4. To obtain proximity of departments of closely related interests, especially if they can share certain physical facilities;

5. To provide as central a location as possible for the entire Humanities complex;

6. To provide an adequate supply of classrooms of different capacities, especially of the smaller size seminar type;

7. To achieve the greatest possible use of existing facilities (College, Bennett, and Logan Halls);

8. To achieve an architectural design which will combine a maximum practicality and efficiency with academic dignity, charm, and, even, leisureliness.

The next three sections of the program identify as follows the planned location of each Humanities department, related activities, and classrooms in accordance with the Campus Development Plan:

In existing buildings

College Hall --	American Civilization History Philosophy Religious Thought Classrooms
Bennett Hall --	English Large Common Room Journal Headquarters American Quarterly Classrooms

Logan Hall[1] -- Language Laboratory
Classrooms

Old Fine Arts Building[2] -- Art (Several faculty studies will also be located in the new building for the Graduate School of Fine Arts.)
Music (Interim location, if required, before permanent facilities are completed.)

In New Humanities Building (Hare Building Replacement)

Classical Studies
Germanic Languages
Linguistics
Oriental Studies
Romance Languages
Slavic Languages
South Asia Regional Studies
Classrooms/Seminars

In Graduate Center

Office of International Services

---

[1] Some Student Affairs' Offices may continue to be located in this building.

[2] The Department of Geology will continue to be located in this building.

THE CAMPUS DEVELOPMENT PLAN

All construction projects on the University Campus must be carried out within the context and the intent of the established Campus Development Plan[1]. The design of each project should reinforce the evolving pattern of Campus superblocks, open spaces, and pedestrian circulation.

Of all the University's buildings, the Humanities complex, consisting of College Hall, Logan Hall; Bennett Hall, and the Hare Building, is most closely identified with the historical growth of the University (Figure 2). The New Humanities Building will replace the Hare Building which is located at the northeast corner of 36th and Spruce Streets. The site is approximately 180 feet EW by 110 feet NS, providing a gross ground area of approximately 19,800 square feet (Figure 3).

The following general considerations need to be noted with regard to a design for the New Humanities Building.

a. The character of the site and the elevation of the embankment east of Logan Hall.

---

[1] See University of Pennsylvania Development Plan statement dated March 1961; and "Campus Development Plan -- 1975" dated October 15, 1965 (Figure 1).

b. The relationship among the buildings that bound the site: Logan Hall on the north, College Hall on the northeast, Houston Hall on the east, the Maloney and Gates Buildings across Spruce Street to the south, and Wistar Institute on the west.

c. The quadrangle bounded by Houston, College, and Logan Halls.

d. The quadrangle bounded by College Hall and the University Library.

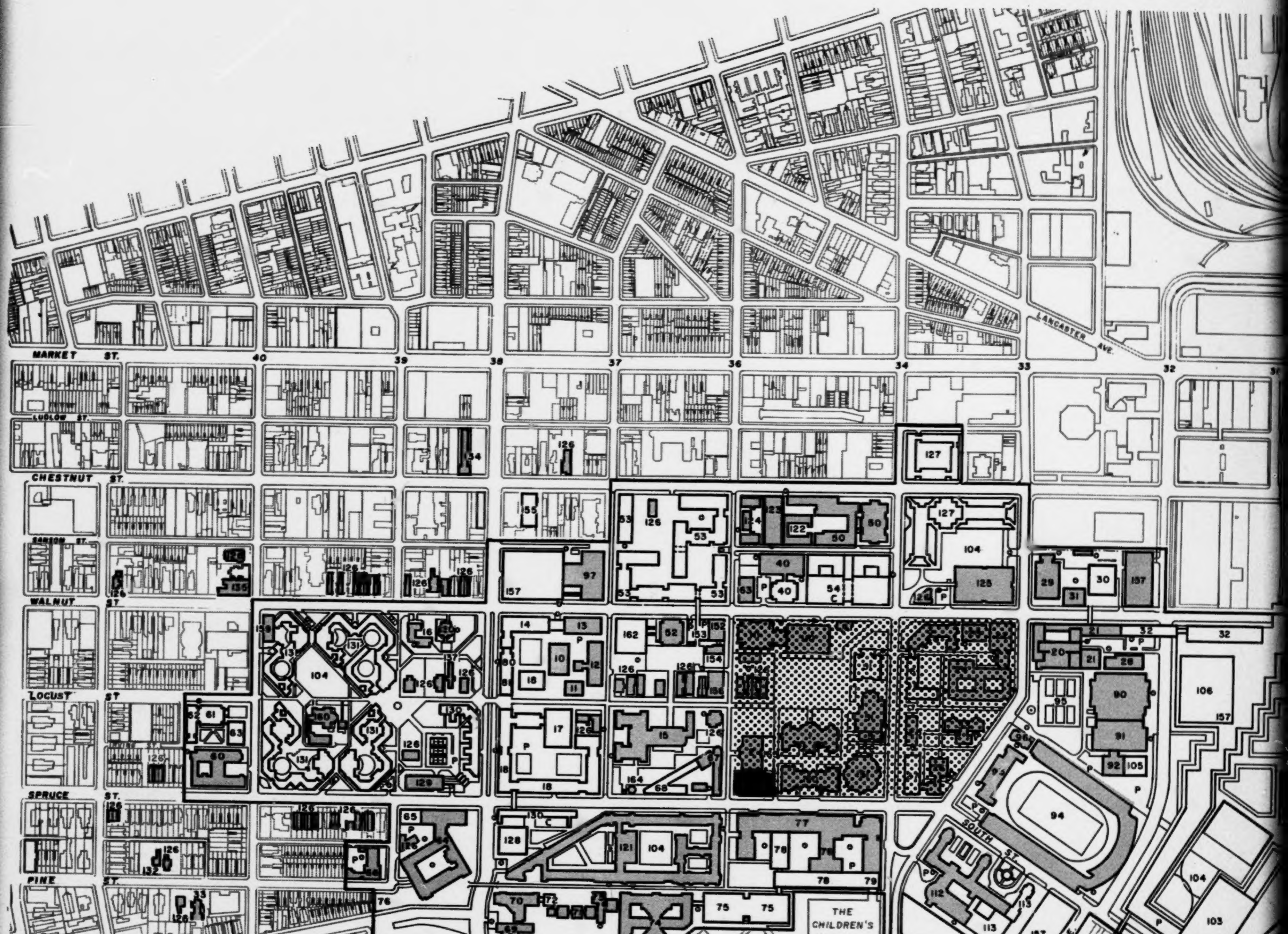
e. The archway and gate between Houston Hall and the New Humanities Building which will continue to serve its present function of providing pedestrian access from Spruce Street to the Houston Hall and College Hall quadrangles.

f. The continued existence of Spruce Street as a heavy traffic artery, and the noise and fumes generated thereby.

g. The future closing of 36th Street, and its incorporation as part of the Campus walkway system.

h. Recognition of the future superblock which will be bounded by 34th, Spruce, 38th, and Walnut Streets within which only pedestrians, service vehicles, and emergency vehicles will be permitted.

It will not be possible to provide on-site parking spaces for the faculty who will occupy the building. Parking spaces required for this building will be provided in one of the University parking terminals.


MARKET ST.
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CHESTNUT ST.
SANSOM ST.
WALNUT ST.
LOCUST ST.
SPRUCE ST.
PINE ST.
BALTIMORE AVE.
WOODLAND AVE.
LANCASTER AVE.
UNIVERSITY AVE.
CURIE AVE.
SOUTH ST.
CONVENTION AVE.
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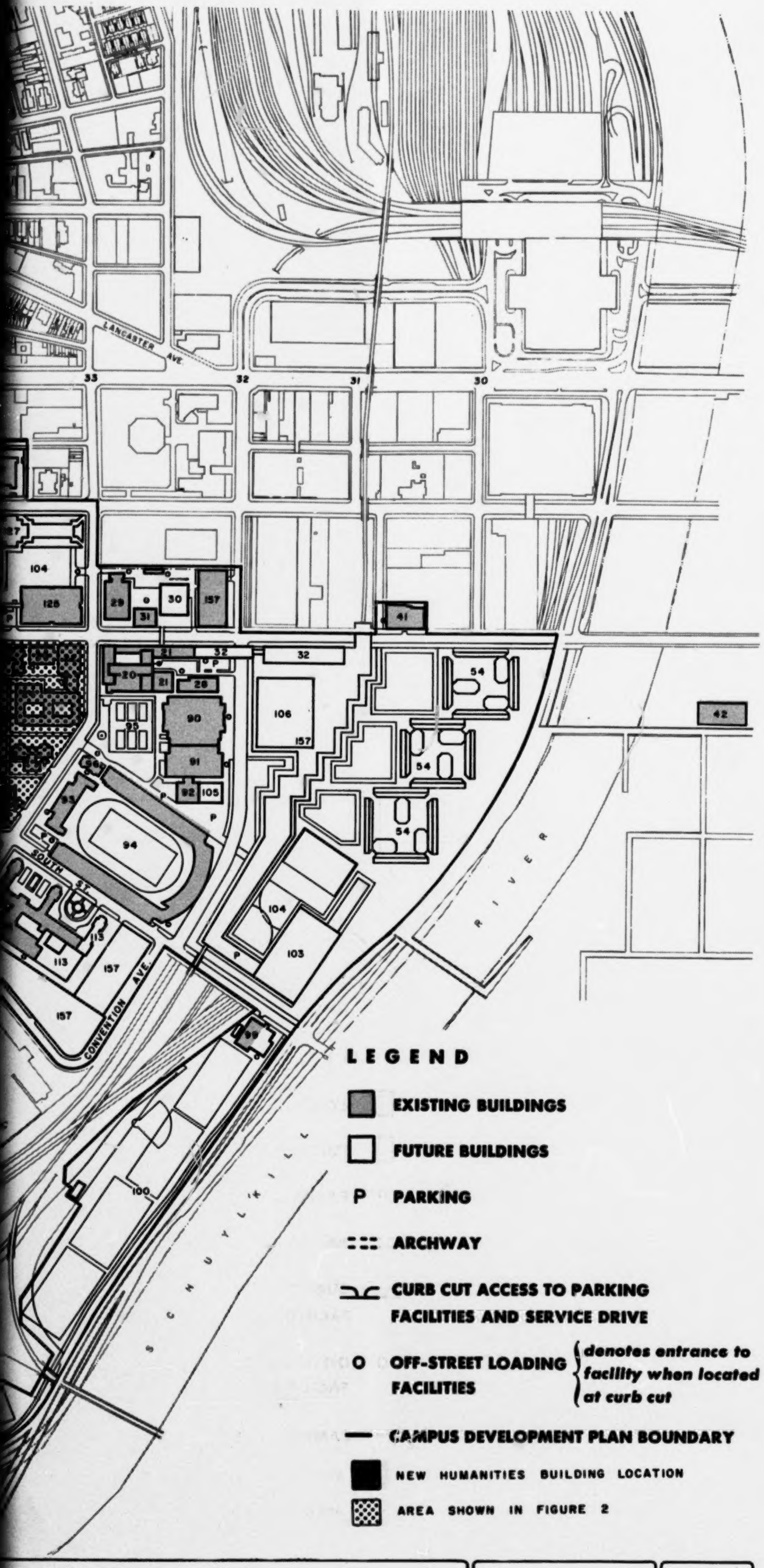
VETERANS ADMINISTRATION HOSPITAL
THE CHILDREN'S HOSPITAL OF PHILADELPHIA
PHILADELPHIA GENERAL HOSPITAL
PHILADELPHIA CIVIC CENTER
SCHUYLKILL

UNIVERSITY of PENNSYLVANIA

UNIVERSITY PLANNING OFFICE

FIGURE 1

CAMPUS DEVELOPMENT PLAN — 1975



LEGEND

▨ EXISTING BUILDINGS

☐ FUTURE BUILDINGS

P PARKING

::: ARCHWAY

CURB CUT ACCESS TO PARKING FACILITIES AND SERVICE DRIVE

O OFF-STREET LOADING FACILITIES {denotes entrance to facility when located at curb cut

— CAMPUS DEVELOPMENT PLAN BOUNDARY

■ NEW HUMANITIES BUILDING LOCATION

▩ AREA SHOWN IN FIGURE 2

PLAN — 1975

0 100' 200' 400' 600'

OCTOBER 15, 1965

N

HUMANITIES AND LIBERAL ARTS

1	COLLEGE HALL
2	LOGAN HALL
3	BENNETT HALL
4	HUMANITIES BUILDING
5	FACULTY STUDIES
6	ACADEMIC FACILITIES *(Including Mathematics)*
162	CENTER for COMMUNICATION ARTS and SCIENCES

SOCIAL SCIENCES

10	DEPARTMENT of PSYCHOLOGY
11	SCHOOL of SOCIAL WORK
12	JOINT-USE BUILDING
13	SCHOOL of EDUCATION
14	SCHOOL of EDUCATION EXPANSION
15	DIETRICH HALL *(Wharton School of Finance and Commerce)*
16	FELS INSTITUTE of LOCAL and STATE GOVERNMENT
17	CENTER for ECONOMICS, REGIONAL SCIENCE and SOCIOLOGY
18	SOCIAL SCIENCE EXPANSION
80	SCHOOL of NURSING *(Relocation Site)*
81	SCHOOL of ALLIED MEDICAL PROFESSIONS *(Relocation Site)*

PHYSICAL SCIENCES

20	RITTENHOUSE LABORATORY
21	RITTENHOUSE EXPANSION
22	MOORE SCHOOL of ELECTRICAL ENGINEERING
23	MOORE SCHOOL GRADUATE RESEARCH CENTER
24	TOWNE SCHOOL of CIVIL and MECHANICAL ENGINEERING
25	GENERAL LABORATORIES BUILDING
26	NEW CHEMISTRY LABORATORIES
27	CHEMISTRY EXPANSION *(New Harrison Laboratory)*
28	TANDEM ACCELERATOR LABORATORY
29	LABORATORY for RESEARCH on the STRUCTURE of MATTER
30	PARTICLE PHYSICS LABORATORY
31	DIRECT CURRENT LABORATORY
32	PHYSICS and ENGINEERING EXPANSION
33	GENERAL EXPANSION

ADMINISTRATION AND SERVICES

40	GENERAL SERVICES CENTER
41	GENERAL PURPOSE
42	LIPPINCOTT BUILDING
1	COLLEGE HALL

GRADUATE AND PROFESSIONAL

11	SCHOOL of SOCIAL WORK
13	SCHOOL of EDUCATION
50	LAW SCHOOL
51	SCHOOL of FINE ARTS
52	ANNENBERG SCHOOL of COMMUNICATIONS
53	GRADUATE CENTER *(Graduate School of Arts and Sciences)*
54	ACADEMIC FACILITIES *(Graduate, Professional, Research)*
60	SCHOOL of DENTAL MEDICINE
64	SCHOOL of VETERINARY MEDICINE and VETERINARY HOSPITAL
74	SCHOOL of MEDICINE
162	CENTER for COMMUNICATION ARTS and SCIENCES

LIFE SCIENCES

60	SCHOOL of DENTAL MEDICINE
61	SDM RESEARCH and TEACHING BUILDING
62	SDM RESEARCH and TEACHING EXPANSION
63	SDM POST GRADUATE STUDIES
64	SCHOOL of VETERINARY MEDICINE and VETERINARY HOSPITAL
65	SVM RESEARCH TOWER
66	SCHOOL of ALLIED MEDICAL PROFESSIONS
67	WISTAR INSTITUTE of ANATOMY and BIOLOGY
68	WISTAR INSTITUTE EXPANSION
69	BIOLOGY SERVICE LABORATORY and GREENHOUSES
70	LEIDY LABORATORY of BIOLOGY
71	BIOLOGY BUILDING
72	BIOLOGY EXPANSION
73	RICHARDS MEDICAL RESEARCH BUILDING
74	SCHOOL of MEDICINE
75	MEDICAL TEACHING and RESEARCH EXPANSION
76	MEDICAL PROFESSIONS EXPANSION
77	HOSPITAL of the UNIVERSITY of PENNSYLVANIA
78	HUP EXPANSION
79	MEDICAL OFFICE TOWER
80	SCHOOL of NURSING *(Relocation Site)*
81	SCHOOL of ALLIED MEDICAL PROFESSIONS *(Relocation Site)*
42	LIPPINCOTT BUILDING
158	BOTANICAL GARDEN

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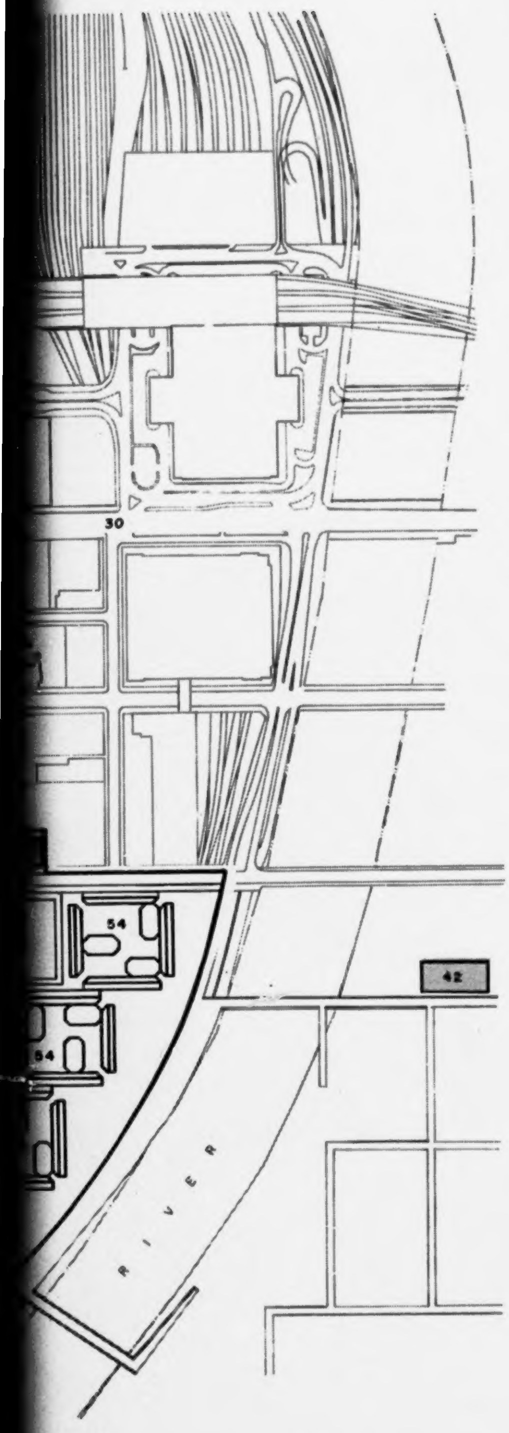

END

XISTING BUILDINGS

TURE BUILDINGS

ARKING

RCHWAY

URB CUT ACCESS TO PARKING
ACILITIES AND SERVICE DRIVE

FF-STREET LOADING
ACILITIES
{ *denotes entrance to facility when located at curb cut*

AMPUS DEVELOPMENT PLAN BOUNDARY

EW HUMANITIES BUILDING LOCATION

REA SHOWN IN FIGURE 2

0' 100' 200' 400' 600'

OCTOBER 15, 1965

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81	SCHOOL of ALLIED MEDICAL PROFESSIONS *(Relocation Site)*
42	LIPPINCOTT BUILDING
158	BOTANICAL GARDEN

PHYSICAL EDUCATION, ATHLETICS AND RECREATION

90	PALESTRA
91	HUTCHINSON GYMNASIUM
92	RINGE SQUASH COURTS
93	WEIGHTMAN HALL
94	FRANKLIN FIELD
95	TENNIS COURTS
96	J. WILLIAM WHITE TRAINING HOUSE
97	GYMNASIUM and POOL
98	WOODLAND ATHLETIC FIELDS
99	MILITARY SCIENCE and ATHLETICS
100	STEWART FIELD
101	MURPHY FIELD
102	MURPHY LOCKER HOUSE
103	FIELDHOUSE and PHYSICAL EDUCATION EXPANSION
104	INTRAMURAL OPEN SPACE
105	SQUASH COURTS EXPANSION
106	ICE SKATING RINK

LIBRARIES AND MUSEUMS

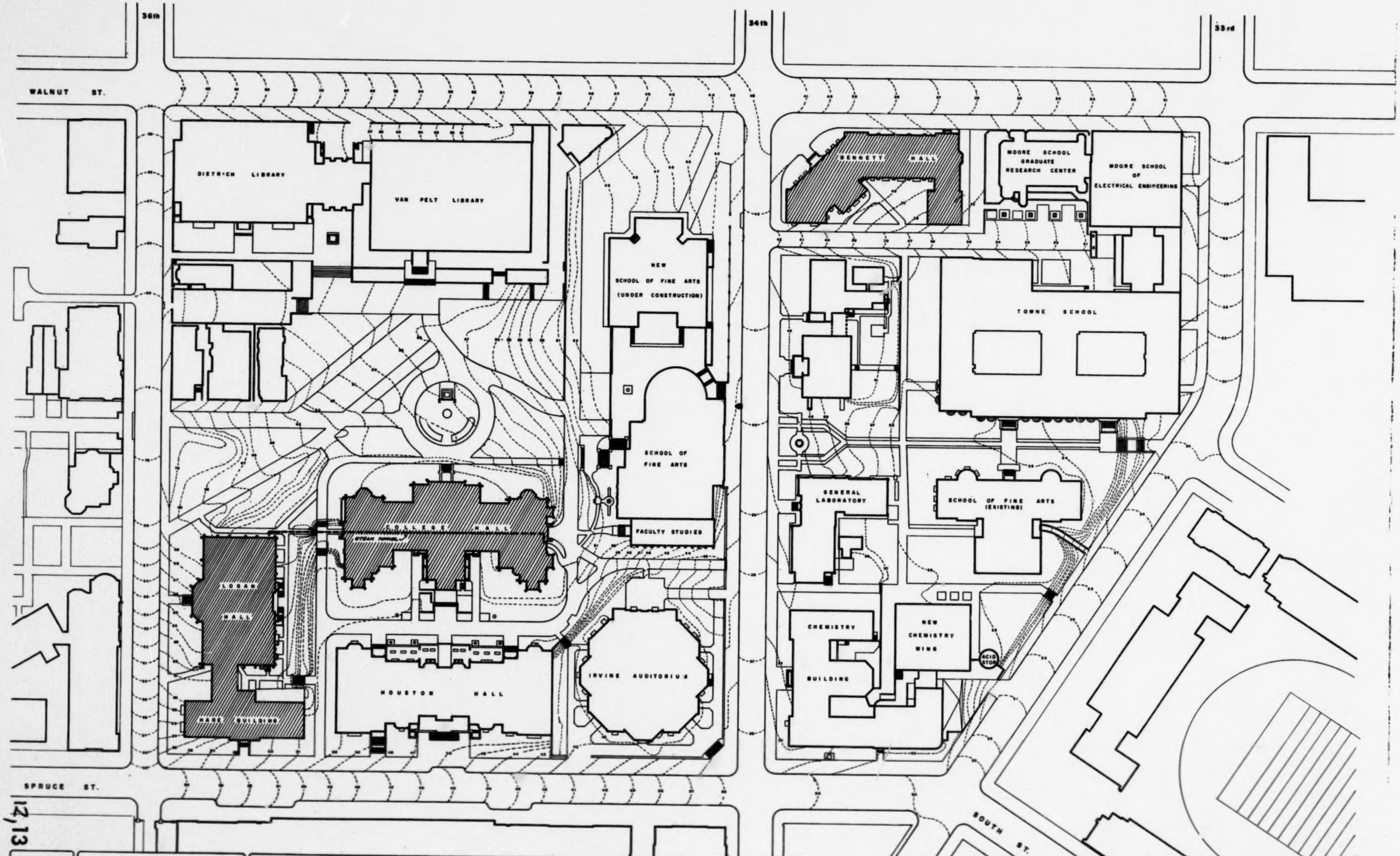
110	VAN PELT LIBRARY
111	DIETRICH LIBRARY
112	UNIVERSITY MUSEUM
113	UNIVERSITY MUSEUM EXPANSION

UNIVERSITY HOUSING AND COMMONS FACILITIES

120	EISENLOHR HALL
121	MEN'S DORMITORIES
122	PEPPER, ROBERTS and STERN DORMITORIES and COMMONS
123	ENGLISH HOUSE
124	KINGS COURT
125	WOMEN'S RESIDENCE HALL
126	FRATERNITIES
127	HOUSE PLAN UNITS
128	FRESHMEN'S COMMONS
129	MAYER GRADUATE STUDENT APARTMENTS
130	STUDENT HOUSING
131	HOUSE PLAN UNITS
132	JOHN MORGAN HOUSE *(4037 Pine St.)*
133	EVANS HOUSE *(Oral Hygienists, 4000 Pine St.)*
134	HARRISON HOUSE *(3815 Chestnut St.)*
135	WALNUT HALL *(40th and Walnut Sts.)*
136	SOUTH HALL *(600 University Ave.)*
137	CHAPLAIN'S RESIDENCE

UNIVERSITY AND RELATED COMMUNITY FACILITIES

150	HOUSTON HALL
151	IRVINE AUDITORIUM
152	SKINNER HALL *(Faculty Club)*
153	FACULTY CLUB EXPANSION
154	HILLEL FOUNDATION *(University Related)*
155	NEWMAN CLUB *(University Related) (Relocation Site)*
156	CHRISTIAN ASSOCIATION *(University Related)*
157	PARKING GARAGE
158	BOTANICAL GARDEN
159	FREE LIBRARY of PHILADELPHIA *(Not University Owned)*
160	ST. MARY'S CHURCH *(Not University Owned)*
161	HAMILTON MANSION
162	CENTER for COMMUNICATION ARTS and SCIENCES
163	OFFICE BUILDING *(133 So. 36th St. Not University Owned)*
164	SUBWAY ESCALATOR and STAIRWAY KIOSK
165	STUDENT ACTIVITIES
P	PARKING
C	CAMPUS SERVICE *(Under Academic and/or Housing Facilities)*


36th
34th
33rd
WALNUT ST.
SPRUCE ST.
SOUTH ST.
DIETRICH LIBRARY
VAN PELT LIBRARY
NEW SCHOOL OF FINE ARTS (UNDER CONSTRUCTION)
SCHOOL OF FINE ARTS
FACULTY STUDIES
BENNETT HALL
MOORE SCHOOL GRADUATE RESEARCH CENTER
MOORE SCHOOL OF ELECTRICAL ENGINEERING
TOWNE SCHOOL
GENERAL LABORATORY
SCHOOL OF FINE ARTS (EXISTING)
COLLEGE HALL
LOGAN HALL
HARE BUILDING
HOUSTON HALL
IRVINE AUDITORIUM
CHEMISTRY BUILDING
NEW CHEMISTRY WING
ACID STOR.

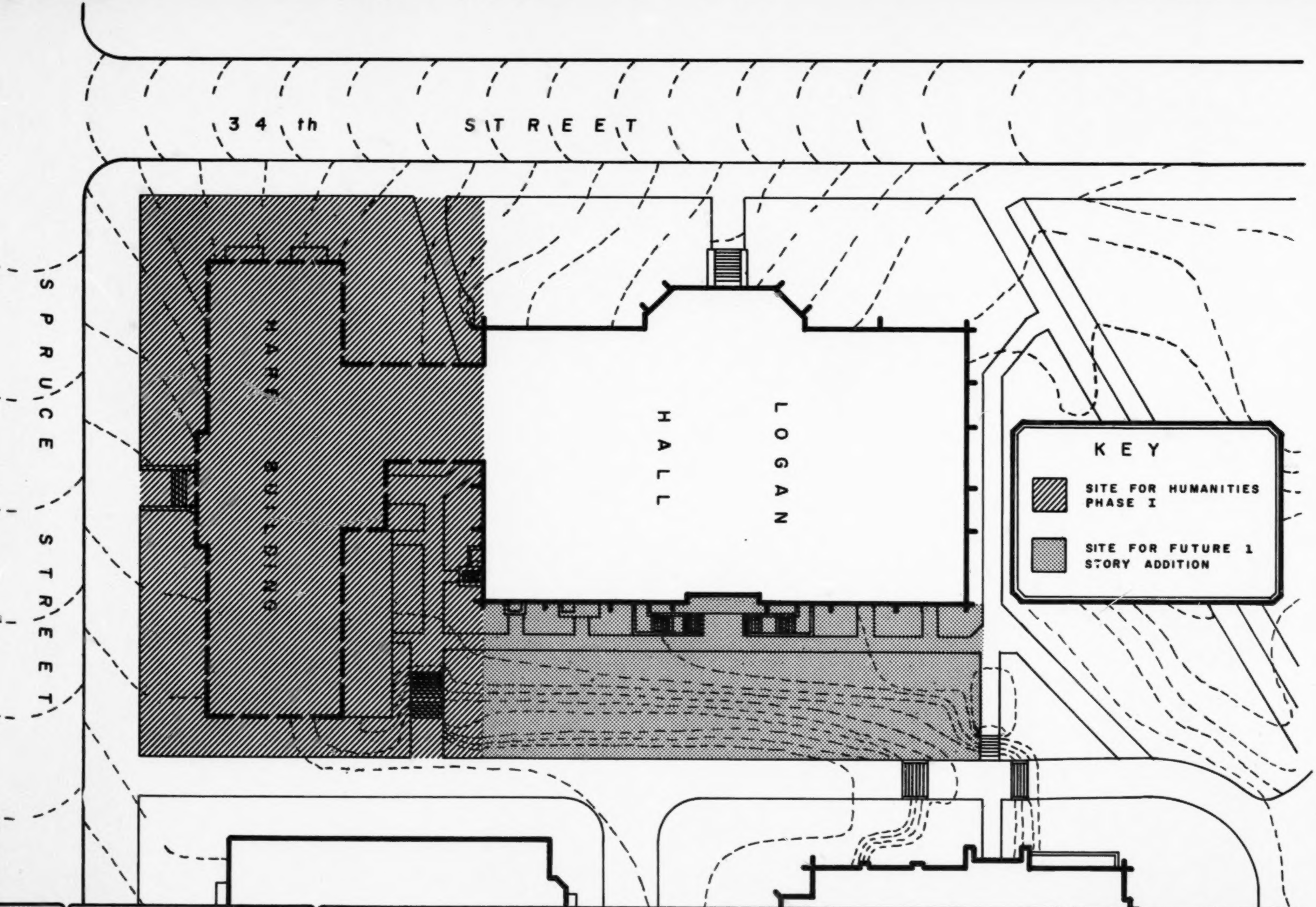
12,13

UNIVERSITY of PENNSYLVANIA
UNIVERSITY PLANNING OFFICE

FIGURE 2

▨ HUMANITIES BUILDINGS 1965

NOVEMBER, 1965


34 th STREET
SPRUCE STREET
LOGAN HALL
HARE BUILDING
KEY
▨ SITE FOR HUMANITIES PHASE I
▒ SITE FOR FUTURE 1 STORY ADDITION

UNIVERSITY OF PENNSYLVANIA
UNIVERSITY PLANNING OFFICE

FIGURE 3
SKETCH SITE PLAN FOR NEW HUMANITIES BUILDING

0' 20' 40'
N

NOVEMBER, 1965

SPACE AND FACILITY REQUIREMENTS

TOTAL REQUIREMENTS

The total space and facility requirements of the Humanities departments are summarized in Table 1 and presented in detail in Table 2.

CONTINUED USE OF EXISTING BUILDINGS

Table 3 shows the extent to which it is currently possible to accommodate the future Humanities requirements in College, Bennett, and Logan Halls after renovation. In addition to providing for the Humanities' space requirements noted in Table 3, College Hall will continue to house the principal administrative offices of the University and the College, the office of the College of General Studies, and the telephone exchange; and Bennett Hall will continue to accommodate the College for Women on the first floor. The utilization of the remaining space in Logan Hall is presently under study in accordance with the considerations described in the subsections titled "Other Needs and Considerations" and "Physical Relationship with Logan Hall."

TABLE 1. HUMANITIES DEPARTMENTS, SUMMARY OF FUTURE SPACE REQUIREMENTS

USE	TOTAL NET AREA (Sq Ft)
ACADEMIC	
American Civilization	2,630
Art	---[a]
Classical Studies	3,340
English	19,330
Office of International Services	---[b]
General Literature	190
Germanic Languages	5,960
History	7,070
Language Laboratory	6,800
Linguistics	5,910
Music	---[a]
Oriental Studies	6,170
Philosophy	5,060
Religious Thought	3,700
Romance Languages	12,000
Slavic Languages	5,660
South Asia Regional Studies	5,910
Total Academic	89,730
CLASSROOM POOL	91,000[c]
RELATED ACTIVITIES	
Large Commons Rooms	2,500
Small Commons Alcoves	1,200
Tutor Society	200
Journal Headquarters	500[d]
Central Duplication, Supply, and Storage	200
Total Related Activities	4,600
TOTAL FUTURE SPACE REQUIREMENTS	185,330

a. See subsection regarding Departments of Art and Music.
b. Location to be in Graduate Center.
c. See Table 2 for a breakdown of sizes.
d. American Quarterly, Hispanic Review, and other publications.

TABLE 2. HUMANITIES DEPARTMENTS, DETAILED FUTURE SPACE REQUIREMENTS

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)	LOCATION
ACADEMIC				
American Civilization				College Hall. (Sizes to be adjusted.)
Faculty Study Areas:				
Single	7	150	1,050	
Double	1	190	190	
Chairman	1	190	190	
Secretaries	2	150	300	
General Office Area	1	200	200	
Conference/Seminar	1	400	400	
Work Area	1	300	300	
Subtotal			2,630	
Art	-	---	---[a]	Old Fine Arts Building and new building for the Graduate School of Fine Arts.
Classical Studies				New Humanities Building.
Faculty Study Areas:				
Single	10	150	1,500	
Double	2	60	120	
Chairman	1	190	190	
Secretaries	2	150	300	
General Office Area	1	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Display Room	1	150	150	
Classroom/Seminar	1	300	300	
Subtotal			3,340	

TABLE 2. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)	LOCATION
English				Bennett Hall. (Sizes to be adjusted.)
Faculty Study Areas:				
Single	50	150	7,500	
Double	42	190	7,980	
Teaching Fellows	20	60	1,200	
Chairman	2	190	380	
Secretaries	3	150	450	
General Office Area	1	900	900	
Conference/Seminar	1	400	400	
Administrative Assistant	1	150	150	
Director of Freshman Composition	1	190	190	
Work Area	1	180	180	
Subtotal			19,330	
Office of International Services	-	---	---	Graduate Center.
General Literature				Bennett Hall.
Chairman	1	190	190	
Subtotal			190	
Germanic Languages				New Humanities Building.
Faculty Study Areas:				
Single	18	150	2,700	
Teaching Fellows	20	60	1,200	
Chairman	2	190	380	
Secretaries	2	150	300	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Classroom/Seminar	2	300	600	
Subtotal			5,960	

TABLE 2. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE	TOTAL NET FLOOR AREA	LOCATION
		(Sq Ft)	(Sq Ft)	
History				College Hall (Sizes to be adjusted.)
Faculty Study Areas:				
Single	30	150	4,500	
Teaching Fellows	16	60	960	
Chairman	2	190	380	
Secretaries	3	150	450	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Subtotal			7,070	
Language Laboratory				Logan Hall. (Sizes to be adjusted.)
Language Laboratory	1	2,400	2,400	
Chairman	1	190	190	
Materials Area	1	300	300	
Teaching Machine Room	1	1,080	1,080	
Laboratory and Seminar	1	1,500	1,500	
Expansion Allowance	-	---	1,330	
Subtotal			6,800	
Linguistics				New Humanities Building.
Faculty Study Areas:				
Single	10	150	1,500	
Teaching Fellows	2	60	120	
Chairman	1	190	190	
Secretaries	2	150	300	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Editorial Office	1	150	150	
Acoustic Laboratory	1	600	600	
Classroom/Seminar	1	300	300	

TABLE 2. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE	TOTAL NET FLOOR AREA	LOCATION
		(Sq Ft)	(Sq Ft)	
Information Retrieval & Chemical Notations				
Faculty Study Areas:				
Single	6	150	900	
Double	1	190	190	
Teaching Fellows	6	60	360	
Principle Investigator	1	190	190	
Secretary	1	150	150	
Work Area	1	180	180	
Subtotal			5,910	
Music	-	---	---[a]	Interim location in Old Fine Arts Building, if required before permanent facilities are completed.
Oriental Studies				New Humanities Building.
Faculty Study Areas:				
Single	18	150	2,700	
Double	3	190	570	
Teaching Fellows	9	60	540	
Chairman	1	190	190	
Assistant Chairman	1	190	190	
Secretaries	2	150	300	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Classroom/Seminar	3	300	900	
Subtotal			6,170	

TABLE 2. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)	LOCATION
Philosophy				College Hall. (Sizes to be adjusted.)
Faculty Study Areas:				
Single	16	150	2,400	
Teaching Fellows	20	60	1,200	
Chairman	2	190	380	
Secretaries	2	150	300	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Subtotal			5,060	
Religious Thought				College Hall. (Sizes to be adjusted.)
Faculty Study Areas:				
Single	10	150	1,500	
Double	2	190	380	
Teaching Fellows	6	60	360	
Chairman	2	190	380	
Secretaries	2	150	300	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Subtotal			3,700	
Romance Languages				New Humanities Building.
Faculty Study Areas:				
Single	30	150	4,500	
Double	2	190	380	
Teaching Fellows	50	60	3,000	
Chairman	1	190	190	
Graduate Chairman	1	190	190	
Secretaries	3	150	450	
Administrative Asst.	1	150	150	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Acoustic Laboratory:				
Laboratory	1	640	640	
Office	1	320	320	
Recording Studio	1	100	100	
Shop	1	100	100	
Work Area	1	180	180	
Classroom/Seminar	4	300	1,200	
Subtotal			12,000	

TABLE 2. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)	LOCATION
Slavic Languages				New Humanities Building.
Faculty Study Areas:				
Single	12	150	1,800	
Double	3	190	570	
Teaching Fellows	2	60	120	
Chairman	1	190	190	
Secretaries	2	150	300	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Work Area	1	180	180	
Office for Diction & Grammer Project	1	400	400	
Office for Department Book Collection	1	300	300	
Classroom/Seminar	4	300	1,200	
Subtotal			5,660	
South Asia Regional Studies				New Humanities Building.
Faculty Study Areas:				
Single	15	150	2,250	
Double	3	190	570	
Chairman	1	190	190	
Undergraduate Chairman	1	190	190	
Administrative Asst.	1	150	150	
Secretaries	2	300	600	
General Office Area	-	200	200	
Conference/Seminar	1	400	400	
Research Project Office	2	190	380	
Language Laboratory	1	200	200	
Work Area	1	180	180	
Classroom/Seminar	2	300	600	
Subtotal			5,910	
TOTAL ACADEMIC			89,730	

TABLE 2. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE	TOTAL NET FLOOR AREA	LOCATION
		(Sq Ft)	(Sq Ft)	
CLASSROOM/SEMINAR POOL				This classroom space will be distributed among Bennett Hall, College Hall, Logan Hall, and the New Humanities Building as delineated in Tables 3 and 5. This space would serve both Humanities and non-Humanities departments and is presently under study.
For 18 to 25 students	15	350	5,250	
For 20 to 30 students	11	400	4,400	
For 22 to 36 students	20	450	9,000	
For 25 to 39 students	61	500	30,500	
For 27 to 42 students	21	550	11,550	
For 45 students	14	600	8,400	
For 80 students	9	1,000	9,000	
For 150 students	1	1,500	1,500	
For 200 plus students	1	3,200	3,200	
For 800 students	1	8,200	8,200	
TOTAL CLASSROOM/SEMINAR			91,000	
RELATED ACTIVITIES				
Large Commons Rooms	1	2,500	2,500	Bennett Hall.
Small Commons Alcoves	8	150	1,200	New Humanities Building.
Tutor Society	1	200	200	Bennett Hall.
Journal Headquarters[b]	1	500	500	Bennett Hall.
Central Duplication, Supply, & Storage	1	200	200	New Humanities Building.
TOTAL RELATED ACTIVITES			4,600	
TOTAL REQUIRED NET SQ FT			185,330	

a. See subsection regarding Departments of Art and Music.
b. American Quarterly, Hispanic Review, and other publications.

TABLE 3. CONTINUED USE OF COLLEGE, BENNETT, AND LOGAN HALLS BY THE HUMANITIES

USE AND BUILDINGS	TOTAL NET AREA (Sq Ft)
CLASSROOMS	
College Hall:	
2 @ 450	900
2 @ 500	1,000
6 @ 600	3,600
1 @ 3,200 (the restored hall on the second and third floors)	3,200
Total College Hall	8,700
Bennett Hall:	
2 @ 250 (equals 350 sq ft ea in Table 1)	700
2 @ 350	700
2 @ 360 (equals 350 sq ft ea in Table 1)	700
3 @ 440 (equals 450 sq ft ea in Table 1)	1,350
1 @ 500	500
3 @ 520 (equals 500 sq ft ea in Table 1)	1,500
2 @ 550	1,100
1 @ 800 (equals 1,000 sq ft in Table 1)	1,000
1 @ 1,760 (equals 1,500 sq ft in Table 1)	1,500
Total Bennett Hall	9,050
TOTAL CLASSROOMS	17,750
ACADEMIC	
College Hall:	
American Civilization	2,630
History	7,070
Philosophy	5,060
Religious Thought	3,700
Total College Hall	18,460
Bennett Hall:	
English	19,330
General Literature	190
Total Bennett Hall	19,520
Logan Hall:	
Language Laboratory	6,800
TOTAL ACADEMIC	44,780

TABLE 3. (CONTINUED)

USE AND BUILDINGS	TOTAL NET AREA (Sq Ft)
RELATED ACTIVITIES	
Bennett Hall:	
Large Commons Room	2,500
Tutor Society	200
Journal Headquarters[a]	500
TOTAL RELATED ACTIVITIES	3,200
TOTAL CONTINUED USE OF EXISTING BUILDINGS BY HUMANITIES	65,730

[a] American Quarterly, Hispanic Review, and other publications.

ADDITIONAL REQUIREMENTS

A comparison of the future total net space needed by Humanities departments and related activities (Table 2) with the proposals for the continued use of College, Bennett, and Logan Halls (Table 3) provides the total additional net space required to meet the needs of the Humanities departments (Table 4).

TABLE 4. HUMANITIES DEPARTMENTS,
ADDITIONAL SPACE REQUIREMENTS

USE	TOTAL FUTURE REQUIREMENTS[a]	CONTINUED USE OF EXISTING BUILDINGS[b]	ADDITIONAL SPACE REQUIREMENTS
	(Sq Ft)	(Sq Ft)	(Sq Ft)
Classrooms	91,000	17,750	73,250
Academic	89,730	44,780	44,950
Related Activities	4,600	3,200	1,400
Total (Net Floor Area)	185,330	65,730	119,600

a. From Table 2. Humanities Departments, Detailed Space Requirements.

b. From Table 3. Continued Use of College, Bennett, and Logan Halls by the Humanities.

OTHER NEEDS AND CONSIDERATIONS

A comparison of the space to be provided in the New Humanities Building (Table 5) and the total additional future space requirements of the Humanities after the available space in existing buildings (College, Bennett, and Logan Halls) has been accounted for (Table 4) identifies a total of 40,000 net square feet of classroom space that will need to be provided elsewhere. (This figure does not include the 800 capacity teaching auditorium, 8,200 net square feet; a space currently being investigated as to need and possible location, since it will serve more than the needs of the Humanities departments.)[1] The additional classroom space can be provided in whole or in part in a number of ways: (1) in a renovated Logan Hall (see subsection titled "Logan Hall Renovation Project and Physical Relationship between New Building and Logan Hall"), (2) in Dietrich Hall (through the use of office and classroom space released by the future construction of the Wharton Graduate Center), or (3) in a future building to be constructed for the Liberal Arts and Humanities along 34th Street, south of Bennett Hall.

DEPARTMENT OF ART

The Art Department's studios are presently located in Weightman Hall and the Old Steam Plant (soon to be rehabilitated for Military Science and Physical Education). These studios are to be consolidated in the Old Fine Arts Building when space in that building is released by the movement of the Graduate School of Fine Arts to its permanent quarters on the College Hall Block. Additional faculty office space for the Art Department will also be provided in the new building for the Graduate School of Fine Arts.

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1. Consideration postponed indefinitely by Executive Planning Committee on the Physical Plant at meeting of November 12, 1965.

DEPARTMENT OF MUSIC

The Music Department is not included in this program because of the Department's specialized activities and the conclusion that its needs can be provided within the proposed Center for Communication Arts and Sciences. Within such a center, it should be possible to provide the listening rooms, music library, electronic studio, recording studio, seminar and rehearsal rooms, and, most important, a full-scale, acoustically qualified hall for chamber music. Since the Music Department is presently located in the Hare Building, which will be demolished to provide the site for the New Humanities Building, it may become necessary to locate the Department on an interim basis in the Old Fine Arts Building when space in that Building is released.

DEPARTMENTS OF GEOLOGY AND MATHEMATICS

These departments are mentioned here because of the relationship between their future space requirements and those of the Humanities.

The Geology Department is currently located in the Old Fine Arts Building. Although the Department's physical plant needs have not been finally determined, it is expected that the Department will expand within the Old Fine Arts Building as space in that Building is released.

It is also expected that the Mathematics Department will ultimately be moved to larger permanent quarters in the new Liberal Arts-Humanities Building to be constructed along 34th Street, south of Bennett Hall.

II PROJECT PROGRAM FOR THE NEW HUMANITIES BUILDING

INTRODUCTION

The project program for the New Humanities Building is presented in this section. The Dean of the College or his designate should be consulted on all matters relating to the organization and use of this Building.

While it is not the intention of the program to impose a particular design approach or limitation, experience and study have shown that consideration of the factors described in this section is desirable.

FUNCTIONAL RELATIONSHIPS WITHIN NEW BUILDING

The functional relationships within the building will be governed by the following criteria which must be observed.

1. **The University Campus is zoned for development as an Institutional District. As such, the height of this building has been limited to eleven stories.**

2. **All classroom/seminar rooms, other than those included as part of the departmental areas (see Table 5), are restricted to the first three levels above an entrance (level) to the building.**

3. **No faculty studies shall be located in interior zones of the building.**

4. **Classrooms, particularly those designed for audio-visual use, may be located in interior zones of the building.**

5. **The lower levels of the building shall include the following facilities:**

    a. **Mechanical and electrical equipment space for the central air-conditioning system.**

b. Service holding space and building storage space.

c. Provision for future connection to central receiving and loading platform. See subsection titled "Receiving and Loading Facilities."

d. Classrooms.

6. The upper levels of the building shall include the following department groups in the order listed, progressing upward.

		Net Area Square Feet
a.	Classical Studies	3,340
b.	Romance Languages	12,000
c.	Germanic Languages	5,960
d.	Slavic Languages	5,660
e.	Linguistics	5,910
f.	Oriental Studies	6,170
g.	South Asia Regional Studies	5,910

7. Where possible, departments should be contained on one level. Where (because of the above criteria) this is not possible, departments should be located on adjacent levels, with direct access between all department elements.

SPACE STANDARDS AND REQUIREMENTS

The space standards and requirements cited in this program are derived from the University publication "Room Sizes, Furniture, and General Criteria for Project Programming" and should be followed as closely as possible. If the architect's studies show that variations may be required because of budget limitations or building design, such variations will be reviewed by the University Planning Office in consultation with the Dean of the College.

Table 5 lists the activities to be accommodated and the spaces to be provided in the New Humanities Building. Table 6 shows the estimated population of the new building.

TABLE 5. NEW HUMANITIES BUILDING
DETAILED SPACE REQUIREMENTS

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)
ACADEMIC			
Classical Studies			
Faculty Study Areas:			
Single	10	150	1,500
Teaching Fellows	2	60	120
Chairman	1	190	190
Secretaries	2	150	300
General Office Area	1	200	200
Conference/Seminar	1	400	400
Work Area	1	180	180
Display Room	1	150	150
Seminars	1	300	300
Subtotal			3,340
Germanic Languages			
Faculty Study Areas:			
Single	18	150	2,700
Teaching Fellows	20	60	1,200
Chairman	1	190	190
Assistant Chairman	1	190	190
Secretaries	2	150	300
General Office	1	200	200
Conference/Seminar	1	400	400
Work Area	1	180	180
Seminars	2	300	600
Subtotal			5,960
Linguistics			
Faculty Study Areas:			
Single	10	150	1,500
Teaching Fellows	2	60	120
Chairman	1	190	190
Secretaries	2	150	300
General Office	1	200	200
Conference/Seminar	1	400	400
Work Area	1	180	180
Editorial Office	1	150	150
Acoustic Laboratory	1	600	600
Seminars	1	300	300

TABLE 5. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)
Information Retrieval & Chemical Notations			
Faculty Study Areas:			
Single	6	150	900
Double	1	190	190
Teaching Fellows	6	60	360
Principle Investigator	1	190	190
Secretary	1	150	150
Work Area	1	180	180
Subtotal			5,910
Oriental Studies			
Faculty Study Areas:			
Single	18	150	2,700
Double	3	190	570
Teaching Fellows	9	60	540
Chairman	1	190	190
Assistant Chairman	1	190	190
Secretaries	2	150	300
General Office	1	200	200
Conference/Seminar	1	400	400
Work Area	1	180	180
Seminars	3	300	900
Subtotal			6,170
Romance Languages			
Faculty Study Areas:			
Single	30	150	4,500
Double	2	190	380
Teaching Fellows	50	60	3,000
Chairman	1	190	190
Graduate Chairman	1	190	190
Secretaries	3	150	450
Administrative Assistant	1	150	150
General Office	1	200	200
Conference/Seminar	1	400	400
Acoustic Laboratory:			
Laboratory	1	640	640
Office	1	320	320
Recording Studio	1	100	100
Shop	1	100	100
Work Area	1	180	180
Seminars	4	300	1,200
Subtotal			12,000

TABLE 5. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE (Sq Ft)	TOTAL NET FLOOR AREA (Sq Ft)
Slavic Languages			
Faculty Study Areas:			
Single	12	150	1,800
Double	3	190	570
Teaching Fellows	2	60	120
Chairman	1	190	190
Secretaries	2	150	300
General Office	1	200	200
Conference/Seminar	1	400	400
Work Area	1	180	180
Office for Diction & Grammer Project	1	400	400
Office for Large Department Library	1	300	300
Seminars	4	300	1,200
Subtotal			5,660
South Asia Regional Studies			
Faculty Study Areas:			
Single	17	150	2,550
Double	3	190	570
Chairman	1	190	190
Undergraduate Chairman	1	190	190
Secretaries	2	150	300
Administrative Asst.	1	150	150
General Office	1	200	200
Conference/Seminar	1	400	400
Research Project Offices	2	190	380
Language Laboratory	1	200	200
Work Area	1	180	180
Seminars	2	300	600
Subtotal			5,910
TOTAL ACADEMIC			44,950
SEMINARS			
For 18 to 25 students	9	350	3,150

TABLE 5. (CONTINUED)

USE	NUMBER	NET FLOOR AREA PER SPACE	TOTAL NET FLOOR AREA
		(Sq Ft)	(Sq Ft)
CLASSROOMS			
For 22 to 36 students	15	450	6,750
For 27 to 42 students	17	550	9,350
For 45 students	8	600	4,800
TOTAL CLASSROOMS/SEMINARS			24,050
RELATED ACTIVITIES			
Small Commons Alcoves	8	150	1,200
Central Duplication, Supply, and Storage	1	200	200
TOTAL RELATED ACTIVITIES			1,400
TOTAL NEW HUMANITIES BUILDING			70,400

TABLE 6. NEW HUMANITIES BUILDING POPULATION BY ACTIVITIES

ACTIVITY	FACULTY	SECRETARIES	STUDENTS	TOTAL
Classical Studies	12	2	11	25
Germanic Languages	38	2	21	61
Linguistics	27	3	30	60
Oriental Studies	31	2	31	64
Romance Languages	92	4	42	138
Slavic Languages	20	2	42	64
South Asia Regional Studies	26	3	21	50
Classrooms	--	-	1,287	1,287
TOTAL POPULATION	246[a]	18[b]	1,485[c]	1,749

a. Seventy percent male, 30 percent female.
b. One hundred percent female.
c. Sixty percent male, 40 percent female. Number of students based on maximum classroom population derived from Table 7 and a utilization factor of 70 percent. This figure should be recalculated on the basis of the classroom capacity achieved by the architect's final design.

INSTRUCTIONAL SPACES

In accordance with University policy, all instructional spaces shall be easily accessible by stairway and shall be located no higher than the third level above an entrance level to the building.[1] The suggested distribution of classrooms in the New Humanities Building has taken this into account.[2]

There is presently a shortage of small rooms on Campus which can be used for instructing groups of from 18 to 45 students. Table 2 describes the total classroom pool, and the range of classroom sizes and capacities, required to serve the Humanities. Table 3 shows the manner in which a portion of these spaces will be supplied in renovated College and Bennett Halls. Table 5 shows the distribution of classroom sizes chosen for the New Humanities Building. If the architect's studies indicate that the variation in sizes of classrooms programmed herein is excessive or inadequate for the design flexibility desired, some adjustment may be made on approval by the University. Instructional spaces may be located, if necessary, in the interior zones of the building. Entrance to an instructional space should be from the rear of the room. Maximum chalkboard and tackboard surfaces should be provided. The chalkboards should be illuminated with individual lighting fixtures. A high level of general illumination should be maintained, and adequate electrical outlets should be provided. Conduits should be provided for the future installation of closed circuit television. (See subsection titled "Central Audio-Visual Services.")

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[1] "Room Sizes, Furniture, and General Criteria for Project Programming," March 22, 1965.

[2] The seminar spaces located within the department office areas are not considered to be a variation from the standards because they have been placed there to permit future department expansion when required. Only small seminar groups are to be scheduled to use these spaces so as to keep the number of students traveling to the department levels to a minimum.

Rooms should have good acoustical treatment. A locked equipment storage closet should be available to each room. A garment hanging strip, preferably concealed, should be available for the use of students and instructor. An instructor's table, without drawers, will be provided for all classrooms. The balance of the room furnishing will be as described below.

Instructional spaces with a capacity between 22 and 36 students (450 square feet in net area) shall be designed as classroom and/or seminar spaces. The specific function of these rooms will be determined at the beginning of each semester as the demand for classrooms and seminars becomes known, and the rooms will be furnished accordingly. In order to simplify movement of furniture, an adjustable tablet arm chair will be provided which can be used for either classroom seating or seminar seating around a table. Chairs should have space in which books may be temporarily stored by the transient occupant. Seminar tables should also be adequately portable to allow for ease of movement to, from, and between rooms. Sufficient furniture should be provided to allow two-thirds of the spaces to be used for either classroom or seminar activities, and one-third of the spaces need only be furnished for seminar activities.

Instructional spaces with a capacity of 27 to 45 students (550 and 600 square feet in net area) shall be designed specifically for classroom instruction and audio-visual presentation. Consideration should be given to the use of existing and newly developed audio-visual aids. Seating should be fixed and may be stepped. Screen size and projection equipment should be coordinated to suit size and shape of room. Screens should be permanently mounted, manually operated, and arranged for multiple viewing. Remote control of lighting and projection equipment should be provided from the instructor's position. Lightproof window blinds should be provided if required by room location.

All instructional spaces 350 square feet, and under, in net area shall be designed for seminar instruction only. No provisions shall be made for the use of audio-visual aids other than conduits for closed circuit television and the usual provision of electrical outlets. (Furniture will consist of a seminar table with chairs.)

FACULTY STUDIES

The faculty studies within each department must be located in close proximity to the department's offices, preferably on the same floor. This will not be possible for several of the departments because of their size; therefore, these departments should be located on adjacent floors. Faculty studies will be furnished with the equipment listed below in accordance with the approved University standards.

Single Studies (Professors, Associate Professors, Assistant Professors).

Fixed Equipment

- 60 Lin. ft. adjustable book shelving
- 12 Lin. ft. storage base cabinets and work surface
- 1 -- 3' x 5' Chalkboard
- 1 -- Coat closet
- 1 -- Tackboard

Movable Equipment

- 1 -- 60" x 30" Executive desk
- 1 -- Executive swivel chair
- 2 -- Side chairs
- 1 -- Five-drawer letter file with lock or equivalent drawer space
- 1 -- Wastebasket

Double Studies (Instructors, Lecturers).

Fixed Equipment

60 Lin. ft. adjustable book shelving
12 Lin. ft. storage base cabinets and work surface
2 -- 3' x 5' Chalkboards
2 -- Tackboards
1 -- Coat closet

Movable Equipment

2 -- 60" x 30" Executive desks
2 -- Executive Swivel chairs
4 -- Side chairs
2 -- Five-drawer letter files with locks or equivalent drawer space
2 -- Wastebaskets

Teaching Fellows

A teaching fellow conducts numerous interviews with his students. His study area must provide privacy and sufficient space to meet with individual students. These requirements will be provided by lockable carrels. Carrels should be movable and installed in spaces which could revert to faculty offices or classrooms when carrels are removed. Each carrel should have a minimum net area of 42 square feet which allows 18 square feet for circulation and possible file space within large rooms. This provides a total net area of 60 square feet which is the figure stated in Table 5. Carrels should contain the following equipment:

Fixed Equipment

1 -- Chalkboard (size to suit carrel)
1 -- Tackboard (size to suit carrel)
18 Lin. ft. book shelving

Movable Equipment

1 -- 48" x 30" Desk
1 -- Swivel chair
1 -- Side chair
1 -- Clothes hook
1 -- Wastebasket

DEPARTMENT CHAIRMAN'S AND ASSISTANT CHAIRMAN'S OFFICES

The chairman's and assistant chairman's offices should be within the general office area of the department. They should have direct access to each other and to the secretarial staff. The chairman's office should have a secondary exit to the corridor. The walls of the rooms should be sound insulated from adjoining rooms and the floors carpeted. Direct access to the department conference room is desirable. Each office should contain the following furnishings:

Fixed Equipment

60 Lin. ft. adjustable book shelving
12 Lin. ft. storage base cabinets and work surface[1]
1 -- 3' x 5' Chalkboard
1 -- Tackboard
1 -- Coat closet

Movable Equipment

1 -- 72" x 30" Executive desk
1 -- Executive swivel chair
4 -- Side chairs
1 -- Wastebasket
1 -- Four-drawer file (with lock)
Carpets
Drapes

SECRETARIAL/RECEPTION/FILING/ADMINISTRATIVE ASSISTANT AND GENERAL OFFICE

Space for secretaries in each department office should be provided as shown in Table 5. This area should be close to the center of circulation, central to the department's faculty studies, and should serve as an area of access to the department for student and faculty. Specific layout of the general office should be coordinated with the department chairman and the Building Committee. The following fixed equipment should be provided for each office and movable equipment for each secretary and/or administrative assistant:

Fixed Equipment

1 -- Coat closet
1 -- Reception counter (if desired by department)

Movable Equipment

1 -- Single pedestal desk with typing wing
1 -- Typist chair
3 -- Letter trays
1 -- Wastebasket
2 -- Side chairs with arms
4 -- Four-drawer, letter size, filing cabinets with locks

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[1] A table or credenza may be used in place of this item, if desired by the department chairman.

CONFERENCE/SEMINAR

Each department will have a conference room or area which is available for use by all members of the department's faculty. It will be used for small department staff meetings, seminars, examinations, etc. In the present project this room or area will be part of the departmental space. Individual offices are not to be enlarged to include a conference area. The conference room should seat approximately 12 people around a table, and should contain chalkboard and tackboard surfaces to allow its occasional use for seminar purposes. Conference rooms should be in a central location within the department's area, and may be placed in the interior zone of the building. One or more walls of the room should be provided with book shelving. The use of the room and its contents will be controlled by a secretary; therefore, it should be adjacent to, and accessible from, the general office of the department. The room should contain the following equipment:

Fixed Equipment

1 -- Chalkboard
1 -- Tackboard
1 -- Manually operated projection screen
1 -- Wall of adjustable book shelving with lockable glass doors

Movable Equipment

1 -- Conference table 14' x 3'6"
12 -- Conference chairs with arms
1 -- Wastebasket
1 -- Garment storage unit (wall mounted with 12 hooks)

WORK AREA

The work area will be a part of the general office of the department and shall provide work and storage space. It may be designed as an alcove or as an enclosed room, as desired by the department. It should contain the following equipment:

Fixed Equipment

Wall cabinets
Base cabinets and work surface
Shelving for office supplies

Movable Equipment

1 -- 3' x 5' Table
4 -- Side chairs
1 -- Wastebasket

CLASSICAL STUDIES' DISPLAY ROOM

This room will be used as a space to display small archeological artifacts, such as old coins, vases, and stone articles with ancient inscriptions upon them. It is not contemplated that the collection will expand; however, some rotation of articles will occur. The room should be adjacent to, and accessible from, the general office and under the control of the secretarial staff. Occasionally, students and faculty will use the room to examine and study the relics in detail. The following fixed equipment and movable furniture should be provided:

Fixed Equipment	Movable Equipment
1 -- Wall of show cases for coin collection and other "antiquities"	1 -- 30" x 60" Free standing, horizontal show case
	5 -- Carrel chairs
	5 -- Small study carrels with 1'6" x 2'0" work surface
	1 -- Wastebasket

LINGUISTICS -- EDITORIAL OFFICE

See description of single studies.

LINGUISTICS -- ACOUSTIC LABORATORY

This room will be used for seminars in acoustic phonetics, and should be adjacent to, and accessible from, one of the faculty studies. It should be soundproof and acoustically treated. A relatively small size room with an area of 120 square feet should be partitioned off within this larger room to serve as a recording cubicle. The latter room should also be soundproof and acoustically treated. The two rooms should contain the following furniture:

Laboratory Proper

Fixed Equipment	Movable Equipment
1 -- Chalkboard	2 -- Seminar tables 30" x 60"
1 -- Tackboard	12 -- Conference side chairs
	1 -- Wastebasket

Recording Cubicle

Fixed Equipment	Movable Equipment
None	1 -- 30" x 60" Table
	4 -- Conference side chairs
	1 -- Wastebasket

LINGUISTICS -- INFORMATION RETRIEVAL AND CHEMICAL NOTATIONS RESEARCH SPACE

Two research projects are to be conducted in this area: (1) in Transformation and Discourse Analysis and (2) in Chemical Notations. These activities do not have any special requirements other than that they be located together as one unit. The spaces noted in Table 5 for this activity should be finished and furnished in the same fashion as other departmental offices. The office of the principle investigator should be identical to that of the department chairman.

ROMANCE LANGUAGE -- ACOUSTIC LABORATORY

This space should be located away from heavily traveled streets and unusually busy corridors. The space will serve two main purposes: (1) a classroom for graduate and undergraduate courses in phonetics and, perhaps, other areas of French linguistics and (2) a laboratory for graduate and faculty research in these fields. Soundproofing and acoustical treatment are extremely important, and special consideration should be given to reducing noise generated by mechanical or electrical systems. Since this is a particularly specialized area, Dr. André Malécot, Professor of Romance Language, should be consulted concerning any questions regarding the laboratory. Questions in regard to mechanical and electrical requirements should be directed to Mr. Leo McBride, Technician, Moore School of Electrical Engineering.

Laboratory Proper

This room should be similar to the classroom/seminar space previously described. In addition, it should be provided with electrical outlets equivalent to the installation for a machine shop. Equipment for the room should be as follows:

Fixed Equipment

- 24" Deep shelves for equipment
- Adjustable book shelving (Quantity of all shelving will be determined by the architect to suit room size and approved by user)
- Electrically operated, permanently mounted, movable screen
- Large chalkboards
- Large tackboard
- Audio-Visual window shades (if required)

Movable Equipment

- 1 -- 14' x 3'6" Conference table
- 15 -- Conference side chairs
- 1 -- Wastebasket
- 1 -- Garment storage unit (wall mounted with 12 hooks)
- 3 -- 3' x 5' Drafting tables
- 3 -- Drafting chairs
- 10 -- Folding chairs with tablet arms

Office

This room should be adjacent and directly accessible to the laboratory proper. The upper half of the partition between the office and laboratory proper should be glass to permit observation of laboratory activities. The room will serve from 1 to 4 occupants and should contain the following equipment:

Fixed Equipment

- 60 Lin. ft. adjustable book shelving
- 1 -- Clothes closet

Movable Equipment

- 2 -- 60" x 30" Executive desks
- 1 -- Executive swivel chair
- 1 -- Secretary's swivel chair
- 2 -- Side chairs
- 1 -- 72" x 30" Worktable
- 2 -- Office supply cabinets with locks
- 4 -- Four-drawer, letter size filing cabinets with locks
- 2 -- Wastebaskets

Recording and Data Collecting Studio

This room should also be directly adjacent and accessible to the laboratory proper, and should be designed so that it can double as a projection booth for the laboratory. It will serve 1 to 3 occupants. An intercommunication system should be provided with the laboratory proper and interconnections through the wall between the studio and laboratory proper should be appropriately shielded. The window between the studio and laboratory proper should be soundproof double glass. Equipment for the studio will be furnished by the Department.

Shop

The shop should also be directly adjacent and accessible to the laboratory proper. It will serve 1 to 3 occupants. A glass window should be located in the door or partition between the shop and laboratory proper. A sink with hot and cold water, towel dispenser, and wastebasket should be provided in the shop. Equipment for the shop will be furnished by the Department.

SLAVIC LANGUAGES -- OFFICE FOR DICTIONARY AND GRAMMAR PROJECT

This room should be located in the vicinity of the Department's general office but need not be directly accessible to it. The following fixed and movable equipment should be provided:

Fixed Equipment	Movable Equipment
2 -- Walls of adjustable book shelving	8 -- Four-drawer, letter size, filing cabinets with locks
	3 -- 30" x 60" Worktables
	12 -- Side chairs
	3 -- Wastebaskets

SLAVIC LANGUAGES -- OFFICE FOR DEPARTMENT BOOK COLLECTION

This room should be centrally located within the Department area. The use of the room and its contents will be controlled by a secretary. The room should, therefore, be adjacent to, and accessible from, the general office of the Slavic Language Department. The following fixed and movable equipment should be provided.

Fixed Equipment	Movable Equipment
The maximum amount of adjustable book shelving that can be accommodated	2 -- 60" x 30" Study tables
	8 -- Side chairs
	1 -- Wastebasket

SOUTH ASIA REGIONAL STUDIES -- RESEARCH PROJECT OFFICES

These offices should be furnished and equipped similar to that of the faculty studies.

SOUTH ASIA REGIONAL STUDIES -- LANGUAGE LABORATORY

This room should be located near the Department's general office. It should be soundproof and acoustically treated. The door to this room should be at least a solid core door. The room should contain the following equipment:

Fixed Equipment	Movable Equipment
1 -- Storage closet with lock and adjustable shelves 24" deep	8 -- Listening booths 8 -- Side chairs
1 -- Storage closet without lock and with adjustable shelves 24" deep	

SMALL COMMONS ALCOVES

These alcoves should be located on each floor and should be near elevators and department general offices. They will be used as waiting areas for students coming to the floors for interviews and counseling. They should contain the following equipment:

Fixed Equipment	Movable Equipment
Telephone booth for pay phone	1 -- Settee to seat 8 persons
	2 -- Lounge chairs
	1 -- End table
	2 -- Ash stands
	1 -- Wastebasket

CENTRAL DUPLICATION, SUPPLY, AND STORAGE ROOM

This room will be used by all departments and should be located near the mid-point of all department office floors. It will be controlled by the department secretary on the floor on which it is located. The room will serve as a central service space for duplication of manuscripts and storage for standard office supplies and equipment, portable microfilm and/or microfiche readers, microfilm and/or microfiche, and such audio-visual aids as slides, film, projectors, and portable projection screens.

Fixed Equipment

Wall cabinets 12" deep with adjustable shelves

Base cabinets 24" deep and 30" high with adjustable shelves

1 -- Sink with hot and cold water

Movable Equipment

1 -- 30" x 72" Worktable
2 -- Side chairs

OTHER SERVICE FACILITIES

Other service facilities which should be included in the building, but whose area is not included in the total net area and will be part of the gross area of the building are:

Janitor Closets

One janitor closet should be provided on each floor of the building. These closets should contain a service sink, mop rack, and supply shelf, and should be secured by lock and key.

Bulk Storage Area

Area should be provided in the basement of the building for bulk storage of maintenance supplies and building equipment. The size of the area will depend on the amount of space remaining after space has been provided for mechanical equipment, elevators, stairs, etc. No special equipment will be required. The space should be dry, heated, ventilated, and well illuminated.

Toilet Facilities

The number and type of fixtures shall be in accordance with the requirements of the Philadelphia Plumbing Code.[1]

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[1] Also see subsection titled "Physically Handicapped."

RECEIVING AND LOADING FACILITIES

New Humanities Building

To the greatest extent possible, the Campus Development Plan provides for off-street receiving and loading facilities on the periphery of each superblock. This will keep the number of service vehicles that need to enter each superblock to a minimum. A central receiving and loading facility is being planned for location between Irvine Auditorium and Furness to serve the New Humanities Building, Logan Hall, Houston Hall, College Hall, Irvine Auditorium, and the Furness Building by way of a service tunnel system. Knock out panels should be provided in the basement of the New Humanities Building so that a connection can be made to the service tunnel. Until this facility and the connecting tunnel system are constructed and in operation, a separate off-street receiving and loading facility must be provided to serve the New Humanities Building and Logan Hall. Unless a better solution can be provided, it is suggested that this facility be located in the area of the existing facility serving Logan Hall and the Hare Building from 36th Street. Although this facility may be closed at the time the central facility and the tunnel connections are completed, its design and construction should not be improvised.

The schematic site plan for the central receiving and loading facility and the connecting service tunnel system is illustrated on Figure 4.

Although the design of the service tunnel system is not a part of the architect's responsibility for this project, the following general information is provided in the belief that it is of some relevance.

Central Facility and Type of Service

In addition to serving as distribution routes for transporting materials and supplies to and from the proposed central receiving and loading platform north of Irvine Auditorium, the tunnels will be required to serve as mechanical equipment channels. Materials to be carried between Houston Hall and the loading platform will be office equipment and supplies, paper products, linen, food supplies, trash, and garbage. Between the New Humanities Building, Logan Hall, College Hall, and the loading platform materials will be limited to office equipment and supplies, and trash.

Materials will be transported by small manual or electric trucks. Minimum tunnel width may be 42 inches; however, a more desirable minimum width would be 60 inches. The height of the tunnels will be governed by the quantity of mechanical service equipment to be carried. Minimum headroom for truck operators should be 7 feet.

Houston Hall Service Tunnel

Houston Hall is presently being serviced from Spruce Street. This causes traffic congestion and unsightly conditions in the front of the building, a condition which the University desires to correct. Preliminary studies made by the University

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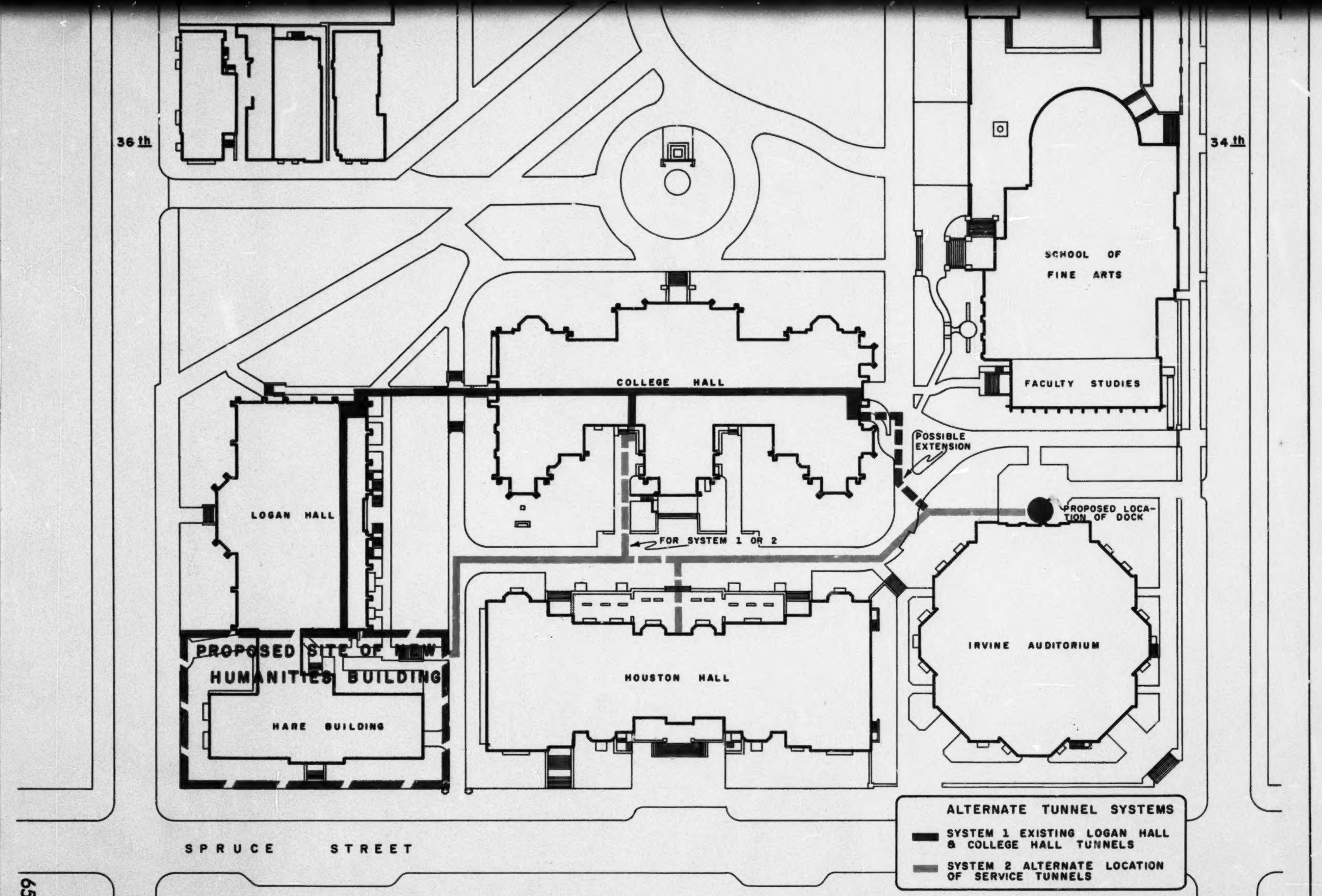
36 th
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SCHOOL OF FINE ARTS
FACULTY STUDIES
COLLEGE HALL
LOGAN HALL
POSSIBLE EXTENSION
PROPOSED LOCATION OF DOCK
FOR SYSTEM 1 OR 2
IRVINE AUDITORIUM
PROPOSED SITE OF NEW HUMANITIES BUILDING
HARE BUILDING
HOUSTON HALL
SPRUCE STREET
ALTERNATE TUNNEL SYSTEMS
SYSTEM 1 EXISTING LOGAN HALL & COLLEGE HALL TUNNELS
SYSTEM 2 ALTERNATE LOCATION OF SERVICE TUNNELS
0' 20' 40' 60' 80'
N

UNIVERSITY of PENNSYLVANIA
UNIVERSITY PLANNING OFFICE

FIGURE 4

CENTRAL RECEIVING AND LOADING FACILITY WITH SERVICE TUNNEL SYSTEM

NOVEMBER, 1965

have indicated that a service tunnel from the Houston Hall basement to a receiving and loading facility north of Irvine Auditorium is quite feasible. Houston Hall is to be remodeled at some future date; however, information is not presently available concerning the precise layout of the basement floor of the building. For the present a service tunnel intersecting the center of the north wall of Houston Hall is being considered, and will be used as the governing criterion for design.

Existing Logan Hall and College Hall Tunnels

The feasibility of expanding the use of the existing utility tunnel has been investigated in a preliminary manner by the University. The route of the existing tunnel has its beginning at the south entrance to the subbasement of Logan Hall and continues north through the length of the building where it intersects the steam tunnel under College Hall (see Figures 2 and 4). The exit of this steam tunnel is at the east end of College Hall, where the floor elevation indicates that a possibility exists for continuing this tunnel to 34th Street between the Furness Building and Irvine Auditorium. The extended tunnel would terminate at the proposed receiving and loading platform. It is recognized that the difficulties present in using this route for service include: (1) low head room in the subbasement of Logan Hall, (2) the possible need to underpin Logan Hall foundations to increase head room, (3) the change in grade between the floor of the subbasement of Logan Hall and the steam tunnel under College Hall, (4) the width of the steam tunnel between Logan Hall and College Hall, and (5) the location of steam mains in the tunnel under College Hall. Even though this route may not prove feasible for delivery services, it should be quite useful for carrying distribution lines from the central air-conditioning facility in the New Humanities Building when this facility is installed.

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Alternate Location for Service Tunnel System

An alternate location for the service tunnel system has also been studied in a preliminary manner. (See Figure 4.) Beginning at the proposed receiving and loading facility, the tunnel would pass under Houston Hall Quadrangle for the entire length of the Quadrangle and terminate somewhere in the vicinity of the new connecting link between Logan Hall and the New Humanities Building. Branch tunnels would extend north and south from this main tunnel to serve College Hall and Houston Hall at about the center of each building.

ACCESS TO NEW BUILDING

The New Humanities Building should be oriented toward the interior of the Campus. Primary access should be from the Houston Hall and College Hall Quadrangles, and 36th Street. The Houston Hall Quadrangle is an extremely active space, and student traffic from this area to the Building will be very heavy. In the future, 36th Street will be closed to become part of the campus walkway system.[1]

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1. Also see following discussion regarding Logan Hall and Logan-East.

III LOGAN HALL AND NEW HUMANITIES BUILDING

LOGAN HALL RENOVATION PROJECT AND PHYSICAL RELATIONSHIP BETWEEN NEW BUILDING AND LOGAN HALL

Although the University has decided to retain Logan Hall as a permanent structure on the Campus Development Plan, the specific activities that it may house are being reviewed as this is being written.

While the renovation of Logan Hall must await the completion of a specific project program for that building, it is hoped that it will be possible to renovate Logan Hall as an extension of the New Humanities Building project. At the present time, the fire tower located in the connecting link with the Hare Building serves as an emergency exit from Logan Hall. The new link which will replace the existing structure and connect Logan Hall with the New Humanities Building, should serve as the replacement element for the existing emergency exit. Recommendations should be made by the architect concerning the feasibility of using the connecting link as the primary circulation element for both buildings. It is hoped that the new connecting link can be included as part of the construction contract for the New Humanities Building. In the event this cannot be accomplished due to Code restrictions, the connecting link may be divorced from the prime contract, and constructed under a separate contract; or, if necessary, a new fire tower may be constructed within Logan Hall. It is hoped that the latter course can be avoided. A final decision will be made on receipt of the architect's schematic study and recommendations.

Other elements of the Logan Hall renovation project will include rebuilding selected floor sections and relocating selected partitions. The existing center stairway will be removed.

Connections of the new building to each floor level of Logan Hall should be made as convenient as possible, but no forced effort is required to keep all floors in exact alignment.

It is desirable that the instruction levels in both buildings are easily accessible to the physically handicapped.[1] The design of circulation elements and rest rooms must also recognize this need.

LOGAN-EAST

Preliminary studies of the Logan Hall-New Humanities Building area have indicated the desirability of constructing a one story (plus basement) structure adjacent to the east side of Logan Hall. This structure will front upon the Houston Hall Quadrangle and should be accessible directly from it. The roof will provide an entrance to the existing Logan Hall basement, and possibly to the connecting link between Logan Hall and the New Humanities Building. (See Figure 1.) The architect's schematic design should include recommendations for the size, area, and volume of Logan-East which will have a proper relationship with the New Humanities Building. Final design for Logan-East will be completed, under another contract, after the University has prepared and approved a project program for the building.

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[1] See section on "Physically Handicapped."

IV ADDITIONAL STANDARDS AND REQUIREMENTS

ELEVATORS AND ESCALATORS

Given the following requirements, the architect should study the number of elevators required in the new building, and prepare a recommendation for the University's consideration.

1. The elevators need to be of sufficient size and speed to accommodate the volume of traffic generated by the department and faculty studies on the upper floors. (See Table 6.) The volume of traffic generated by the seminar space on the upper floors should be calculated on the basis of future use of this space as single faculty studies rather than on the basis of its temporary use as seminar rooms (1 faculty member for every 150 square feet of seminar space). Student traffic to and from these floors for the purposes of counseling should be calculated on the basis of 150 majors and 580 graduate students on a schedule of one interview every 3 weeks for each student.

2. Additional capacity should be provided as a safety factor to allow for those students who will insist on using the elevators when traveling to the classrooms on the lower levels.

3. Students should be encouraged to use the stairways rather than the elevators by:

   a. Limiting the major portion of the classrooms to levels no higher than three levels above the highest entrance level to the building;

   b. Providing ample circulation routes between the building's entrances and the primary classroom levels;

   c. Strategically placing the elevators and stairways apart from each other;

   d. Locating stairways near the primary entrances to the building; and

   e. Providing a comfortable stairway gradient serving the lower levels.

4. One elevator serving all of the net use areas should also service the basement and penthouse level(s) (mechanical equipment and storage areas), the proposed service tunnel, and the receiving and loading platform. If it is not possible to also serve the proposed service tunnel and the receiving and loading platform with this elevator, a separate lift may be required for this purpose.

5. It would be desirable to include sufficient elevator capacity in the new building to serve Logan Hall. To determine the feasibility of this proposal, the following estimate of future population for Logan Hall should be used.

TABLE 7. LOGAN HALL

ESTIMATED FUTURE POPULATION BY FLOOR LEVEL AND ACTIVITY

FLOOR LEVEL AND ACTIVITY	POPULATION
Ground Floor -- Classrooms	360
First Floor -- Classrooms	350
Second Floor -- Classrooms	360
Third Floor -- Language Laboratory & Office	210
Fourth Floor -- Offices	40
TOTAL	1,320

6. It is desired that the architect should consider the feasibility of using escalators to serve the classroom levels of both Logan Hall and the New Humanities Building, and present his conclusions and recommendations to the University with his schematic design submittal.

PRIVACY, NOISE, AND FUMES

The building design should assure the privacy of areas on the ground and basement levels. It should also reduce the intrusion of noise and fumes originating on Spruce and 36th Streets to the absolute minimum without eliminating the amenities of natural light and other values so important to the occupants in some areas of this building.

MATERIALS AND CONSTRUCTION

University policy places high value upon construction for durability and fitness of purpose. The materials for this building should have a familiar relationship to those materials which help to establish the character of the majority of the buildings on the Campus. The architect is expected to exercise his best judgement and skill in the selection of materials and finishes which, in addition to meeting design objectives, will also minimize the annual maintenance and operating costs throughout the useful life of the facility.

Materials used on the exterior are to be brick, limestone, glass, and concrete, with brick predominating. Exposed poured in place concrete shall not be used. Exposed concrete, if used, shall be precast in accordance with specifications approved by the University. Materials used on the interior shall be selected to meet design objectives, low maintenance and operating costs, and low initial cost.

Due recognition must be given to the differences between separate requirements of classrooms and faculty spaces. Isolation of noise and sound transmission is desirable everywhere, and essential to faculty studies.

Applicable municipal and state land development and building codes will regulate all construction. Although construction undertaken by the General State Authority is normally responsible only to State regulation, agreement has been reached whereby local codes will be respected and, in case of conflict, the more stringent regulation will govern.

EQUIPMENT AND UTILITIES

STEAM AND ELECTRICAL SERVICE

The University maintains a distribution network for steam and electric service which it purchases from the Philadelphia Electric Company. These lines are available close to the project site. Equipment is normally required in each project to receive high energy loads and to convert them to appropriate pressures or currents for use within the building system. All utilities to the building will be metered.

INDIVIDUAL BUILDING AIR-CONDITIONING AND MECHANICAL SYSTEM[1]

The entire facility, except mechanical and service areas, shall be air-conditioned. An individual mechanical system for the building shall include, but shall not be limited to:

1. Mechanical heating, cooling, and an adequate ventilating capacity.

2. Zone controls as required by orientation, building size, and usage.

3. Two or more chillers of equal capacity, properly interconnected, with necessary provisions for future expansion to the central air-conditioning system described below.

4. An appropriate water circulation system provided with spare pumps.

5. A winterized cooling tower for year-round operation of system.

When the architect desires to depart from the above requirements for operational reasons, he shall submit his design and request to the University for approval.

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[1] Also see following subsection for "Central Air-Conditioning System."

CENTRAL CONTROL PANEL

A central control panel incorporating a schematic illustration of the mechanical and electrical systems, and indicating their vital points, shall be provided in the project at a location selected by the Department of Buildings and Grounds. The panel shall also contain indicators of operating conditions such as temperature, humidity, and pressure for specified equipment and areas; and provide for the starting and stopping of specific equipment.

CENTRAL AIR-CONDITIONING SYSTEM

The architect's design shall provide for the future installation of central air-conditioning facilities to serve a building complex composed of the New Humanities Building, Logan Hall, Houston Hall, College Hall, Irvine Auditorium, and the Furness Building.

Initial studies made by the consulting mechanical engineer[1] indicate that the size of a central air-conditioning facility for the above mentioned complex will approximate 1,500 tons using hermatic electrical centrifugal refrigeration machines. This size plant will require a mechanical equipment room for chilled water equipment of approximately 3,100 square feet, and an electrical equipment room of 400 square feet. These rooms should be located in the basement, and will require a ceiling height of approximately 18 feet. A cooling tower for this system, located at the penthouse level, will require an area of about 1,700 square feet and a height of about 18 feet 6 inches. Additional space, located as desired by the architect, will be required for air handling equipment for the building.

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[1] University of Pennsylvania Refrigeration Survey, Charles S. Leopold, Inc., September 14, 1965.

More definitive requirements will be provided to the architect by the University's consulting engineer. The architect will be required to include these requirements in his design for the building, and coordinate and review his design for the air-conditioning system with the University's consultant. The architect will also be required to make provisions to isolate vibration and noise at both basement and penthouse levels.

As noted in the subsection titled "Existing Logan Hall and College Hall Tunnels," the existing tunnel system under both buildings may be the means for carrying distribution lines from the central air-conditioning facility in the New Humanities Building to several of the buildings being served.

TELEPHONE CONDUITS

Telephone conduits shall be installed so that internal communication can be provided to all areas, and arrangements for outside service can be made, in accordance with University policy. Conduits shall be of sufficient diameter to carry both telephone wire and TV cable.[1] Recessed areas to accommodate pay telephone booths should be provided on each floor of the building.

MECHANICAL EQUIPMENT AND UTILITIES DESIGN REVIEW

The design of mechanical equipment and utilities must be reviewed with the Department of Buildings and Grounds. Information on location and proposed extension of University utility distribution lines will be furnished to the architect and should be checked with the Department of Buildings and Grounds engineering staff.

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[1] Also see section "Central Audio-Visual Services."

CENTRAL AUDIO-VISUAL SERVICES

The University is undertaking a study for central TV programming and for the installation of separate audio-visual studio and ancillary services on Campus. While a separate studio will not be a part of this project, the University has established a policy to provide conduits for the future installation of closed circuit television service in all new buildings being constructed on the Campus. This conduit installation shall include the following:

1. A main conduit extending vertically through the building terminating in the basement mechanical equipment space, and above the roof of the building, and capped at both ends. The diameter of the conduit shall be large enough to carry the size of coaxial cable required to serve the needs of the building. Future extension of this sytem will be made from the basement terminus to the central audio-visual studio on Campus. At some future date, when commercial or educational TV reception is desired, a TV master antenna system will be installed at the roof level.

2. Separate conduit runouts from the main conduit to each classroom terminating at a TV outlet in front of the room. The outlet shall contain both a TV and telephone jack. The diameter of these runouts should be adequate to accommodate the size of coaxial cable required to serve the classroom plus a telephone wire.

MAINTENANCE, SAFETY, AND SERVICE

The Department of Buildings and Grounds is responsible for the maintenance of all buildings, facilities, and utility systems. The Department's concern includes waste collection, delivery and pickup service, maintenance or operation of mechanical and electrical systems, routine maintenance connected with normal repair and housekeeping, and the general safety and security of the University population.

The Department will review all schematic, preliminary, and advanced design submittals with regard to specifications for fire extinguishers (including sprinklers) and their locations; control of entrances and exits; the collection, storage, and/or disposal of trash and garbage; housekeeping, maintenance, and repair; housekeeping supply and storage areas; service areas; loading and unloading facilities; and for compliance with the standards of all other areas of maintenance and operation over which it has jurisdiction.

PHYSICALLY HANDICAPPED

The architect should consult the "American Standards Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped" (A117.1-1961), and incorporate such recommended design considerations, facilities, and fixtures as may be applicable. At least one building entrance shall be without steps and provide convenient access to the elevators. Appropriate hand rails shall be provided on the side of exterior steps and ramps and in at least one toilet for each sex.

SIGNS AND OTHER ITEMS REQUIRING DETAILED DESIGN ATTENTION

The building's name, as it is finally determined, shall be placed in an appropriate location, so that it can identify the building to the passerby, and be part of the exterior building design. The location of bulletin boards, telephone booths, building directory, mail boxes, fire alarm boxes, fire sprinklers and extinguishers, thermostats, other signs, and other miscellaneous items both inside and outside the building shall also be given the necessary detailed design attention. Such design items include, for example, the door mat (or appropriate alternates). If a door mat is to be used, it should be placed in a recessed floor section so that the mat top is at the established floor level.

MODULAR COORDINATION

The University suggests that the architect review the modular design approach recommended by the American Institute of Architects and the Modular Building Standards Association and determine whether it is applicable to this project.

WINDOWS

The sash shall be a combination of fixed and key-operated units. All exterior rooms used for human occupancy shall be provided with key-operated sash which will allow a minimum opening equivalent to 5 percent of the net floor area of the room.

Window sills shall be held to the normal height above the floor, and all glass shall be accessible for cleaning.

Sash shall be so designed that the installation of replacement glass can be made from the interior of the building. Sash dimensions shall be such that replacement glass can be handled easily by no more than two men and transported through the interior of the building after completion of construction.

Glass size, type, and manufacture shall be immediately available from local or warehouse stock. Glass requiring special order and manufacture shall not be used.

Solar corrections for glare and heat gain shall be provided for glass exposures on all sides of the project. As a measure for evaluation, the architect shall present to the University the shading coefficients for the method of solar protection he intends to use for the building. The shading coefficient shall be calculated on the same basis used in Victor Olgyay's book "Design with Climate," Princeton University Press, 1963.

The solution of this problem shall be considered from the standpoint of use, cost, design, operation, and maintenance.

Sun control devices shall not interfere with the cleaning or replacement of glass.

FIXED AND MOVABLE EQUIPMENT

FIXED EQUIPMENT

The architect shall include in his design all fixed equipment. Fixed equipment includes, by example, the following: Mechanical equipment, conduits, wall cabinets, chalkboards, tackboards,

building directory, built-in bookcases and/or adjustable shelves (in conference-seminar rooms, offices, and other appropriate areas), sun control devices, signs, protective chair rails, built-in requirements for office supplies and equipment storage, and other items that are an intrinsic part of the building.

MOVABLE EQUIPMENT

The Purchasing Department is responsible for the acquisition of movable equipment for this project. The Department will be assisted by a Project Furnishings Committee. The architect will be invited to be a member of the Project Furnishings Committee. The Committee's membership will include the Dean of the School and his designates, and representatives from the Purchasing Department and appropriate operating departments. The Committee's responsibilities will include reviewing the furniture and movable equipment items submitted for consideration.

V. DEPARTURE FROM PROGRAM'S STANDARDS AND REQUIREMENTS

When the architect may need or desire to depart from any of this program's standards and requirements, he shall bring to the University's[1] attention any proposed departures (with the supporting reasons and substantiation appropriately described, graphically and in writing) and request the University's approval.

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[1] See "Project Administration."

VI. PROJECT CONSTRUCTION BUDGET

A total project construction budget will be established for this project on completion and approval of the schematic design and breakdown estimate of cost. This budget will include all of the mechanical and fixed equipment, and other items that are an intrinsic part of the building.

A base figure of $3,025,000 has been requested from the General State Authority for this project. This figure will be amended, after the approved schematic submission with its estimate, to reflect the increase, if any, in total construction allocation due to additional, limited participation by the University. At this time, the total project construction budget will become fixed, and the University will expect the architect to develop designs and contract documents which will be consistent with the established project budget. This obligation is mandatory. The architect shall present to the University[1] at each subsequent design stage, an updated breakdown estimate of cost; and, when required, will suggest alternates for adjusting the program and design objectives to meet the established budget. Such objectives shall not be changed, however, without University authorization.

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[1] See "Project Administration."

VII. PROJECT ADMINISTRATION

The development of the design and construction phases of this project will be administered by the New Construction Department. This Department will coordinate all meetings and will schedule periodic reviews of each phase of the architect's work with the Project Planning Committee, the Design Review Committee, and with the University Planning Office to insure development consistent with the approved project program, the Campus Development Plan, and the approved project budget. The New Construction Department will also arrange for the review of the appropriate phases of the architect's work with the Department of Buildings and Grounds, the Project Furnishings Committee, and other appropriate agencies of the University.

The New Construction Department will, in consultation with the architect, establish a work schedule which will include the expected completion dates for each architectural service stage; up to and including the dates on which final contract documents are expected to be completed, bids received, and construction contract awarded.

The architect should submit any proposed departures from the standards and requirements in this program (with the supporting reasons and substantiation appropriately described, graphically and in writing) to the New Construction Department for University review.

BIBLIOGRAPHY

Educational Facilities Laboratories. *Buildings and Facilities for the Mathematical Sciences*, by J. Sutherland Frame and John W. McLeod. Washington: 1963.

Educational Facilities Laboratories. *Planning for Schools with Television: Design for Educational TV*, by Dave Chapman, Inc. New York: 1960.

Educational Facilities Laboratories. *New Spaces for Learning: Designing College Facilities to Utilize Instructional Aids and Media*, by Harold D. Hauf, Wayne F. Koppes, Alan C. Green, and Morton C. Grassman. Troy: 1961.

American Standard Specifications. *Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped* (A117.1-1961). Chicago: 1961.

Princeton University Press. *Design with Climate*, by Victor Olgyay. Princeton: 1963.

________________. University Planning Office. *University of Pennsylvania Development Plan: A Report to the President*. 3rd printing. Philadelphia: March 1961.